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- b) laminating or coating the microcups with a layer of a positive photoresist;
- c) imagewise exposing the positive photoresist to selectively open the microcups in a predetermined area;
- d) filling the opened microcups with a charged pigment 5 dispersion in a dielectric solvent or solvent mixture which comprises a dye or pigment of a first color;
- e) top-sealing the microcups filled with said charged pigment dispersion in said dielectric solvent or solvent mixture of the first color;
- f) repeating steps c) to e) in different areas to generate microcups filled with charged pigment dispersion in dielectric solvent or solvent mixture of different colors;
- g) removing residual positive photoresist, if any; and h) applying a conductor layer or a permanent substrate
- h) applying a conductor layer or a permanent substrate 15 layer onto the top-sealed microcups.
- 14. The process of claim 13 wherein said thermoplastic or thermoset precursor is selected from the group consisting of polyvalent acrylates or methacrylates, polyvalent vinyls, polyvalent epoxides, polyvalent isocyanates, polyvalent 20 allyls and oligomers or polymers comprising a crosslinkable functional group.
- 15. The process of claim 13 wherein said embossing is carried out at a temperature near or above the glass transition temperature of said thermoplastic, thermoset or precursor 25 thereof.
- 16. The process of claim 13 wherein the male mold is released before, during or after the embossed layer is hardened
- 17. The process of claim 13 wherein said radiation curable 30 composition comprises a material selected from the group consisting of polyvalent acrylates or methacrylates, polyvalent vinyls, polyvalent epoxides, polyvalent isocyanates, polyvalent allyl and oligomers or polymers comprising a crosslinkable functional group.
- 18. The process of claim 13 wherein said imagewise exposing is accomplished by UV, visible light, near IR or electron beam radiation.
- 19. The process of claim 13 wherein said top sealing is accomplished with a sealing composition having a specific 40 gravity lower than that of said dielectric solvent or solvent mixture.
- **20**. A process for the manufacture of a multi-color semi-finished display panel, which process comprises the steps of:
 - a) coating a layer of a thermoplastic, thermoset or precursor thereof on a conductor layer or a permanent substrate layer followed by embossing the coated layer with a male mold or imagewise exposing a layer of a

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- radiation curable composition coated on a conductor layer or a permanent substrate layer followed by removing unexposed areas, to form an array of microcups;
- b) laminating or coating the microcups with a layer of a positive photoresist;
- c) imagewise exposing the positive photoresist to selectively open the microcups in a predetermined area;
- d) filling the opened microcups with a charged pigment dispersion in a dielectric solvent or solvent mixture which comprises a dye or pigment of a first color;
- e) top-sealing the microcups filled with said charged pigment dispersion in said dielectric solvent or solvent mixture of the first color;
- f) repeating steps c) to e) in different areas to generate microcups filled with charged pigment dispersion in dielectric solvent or solvent mixture of different colors;
- g) removing residual positive photoresist, if any; and
- h) applying a temporary substrate layer onto the topsealed microcups.
- 21. The process of claim 20 wherein said thermoplastic or thermoset precursor is selected from the group consisting of polyvalent acrylates or methacrylates, polyvalent vinyls, polyvalent epoxides, polyvalent isocyanates, polyvalent allyls and oligomers or polymers comprising a crosslinkable functional group.
- 22. The process of claim 20 wherein said embossing is carried out at a temperature near or above the glass transition temperature of said thermoplastic, thermoset or precursor thereof
- 23. The process of claim 20 wherein the male mold is released before, during or after the embossed layer is hardened.
- 24. The process of claim 20 wherein said radiation curable composition comprises a material selected from the group consisting of polyvalent acrylates or methacrylates, polyvalent vinyls, polyvalent epoxides, polyvalent isocyanates, polyvalent allyl and oligomers or polymers comprising a crosslinkable functional group.
- **25**. The process of claim **20** wherein said imagewise exposing is accomplished by UV, visible light, near IR or electron beam radiation.
- 26. The process of claim 20 wherein said top sealing is accomplished with a sealing composition having a specific gravity lower than that of said dielectric solvent or solvent mixture.

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